

IN THE CLAIMS

1. (Original) A surface layer, comprising:

a substrate element;

a plurality of layers, of which one layer is a transition layer to the substrate element;

wherein the surface layer includes a ceramic layer containing a chemically bonded metal, and wherein the substrate element is a metallic substrate element; and

wherein the transition layer contains intermetallic phases comprising the metal of the substrate element and the metal of the ceramic layer.

2. (Original) The surface layer according to Claim 1, wherein the ceramic layer comprises an oxide ceramic.

3. (Original) The surface layer according to Claim 1, wherein the ceramic layer comprises at least one of a titanium-containing and silicon-containing oxide ceramic.

4. (Original) The surface layer according to Claim 2, wherein the ceramic layer comprises at least one of a titanium-containing and silicon-containing oxide ceramic.

5. (Original) The surface layer according to Claim 1, wherein the substrate element comprises an alloy material based on at least one of aluminum and iron.

6. (Original) The surface layer according to Claim 2, wherein the substrate element comprises an alloy material based on at least one of aluminum and iron.

7. (Original) The surface layer according to Claim 3, wherein the substrate element comprises an alloy material based on at least one of aluminum and iron.

8. (Cancelled)

9. (Original) The surface layer according to Claim 2, wherein the transition layer contains aluminum titanates and aluminum oxide.

10. (Original) The surface layer according to Claim 3, wherein the transition layer contains aluminum titanates and aluminum oxide.

11. (Original) The surface layer according to Claim 5, wherein the transition layer contains aluminum titanates and aluminum oxide.

12 - 15. (Cancelled)

16. (Previously Presented) A surface layer, comprising:
a substrate element;
a plurality of layers, of which one layer is a transition layer to the substrate element;
wherein the surface layer includes a ceramic layer containing a chemically bonded metal, and wherein the substrate element comprises aluminum; and

wherein the transition layer contains intermetallic phases comprising the metal of the substrate element and the metal of the ceramic layer.

17. (New) A surface layer, comprising:

a substrate element;

a plurality of layers, of which one layer is a transition layer to the substrate element;

wherein the surface layer includes a ceramic layer containing a chemically bonded metal, and wherein the substrate element is a metallic substrate element;

wherein the transition layer contains intermetallic phases comprising the metal of the substrate element and the metal of the ceramic layer; and

wherein the transition layer contains aluminum titanates and aluminum oxide.